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-52-

AMENDED CLAIMS

[received by the International Bureau on 19 September 1997 (19.09.97);
original claims 1, 3, 7-9, 12, 21, 22, 24, 26, 34, 35, 82, 88, 103,
107, 109, 113, 114, 125, 126, 128, 130, 137, 138, 145, 184 and 186 amended;
new claims 192-198 added;
remaining claims unchanged (14 pages)]

1. Integrated circuit (IC) module apparatus for
dispensing postage for a mail piece comprising:
5 a memory for storing first data representative of a
value of postage funds;
an interface for receiving selected information
concerning the mail piece and information concerning a
value of the postage, the value of the postage funds
10 being a function of the value of the postage; and
a processor for encrypting at least the selected
information to generate second data, the first data and
the second data being provided for creation of a postage
indiciuim indicative of payment of the postage.
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2. The apparatus of claim 1 wherein said second data
includes a digital signature.
3. The apparatus of claim 1 wherein said memory further
20 includes an encryption algorithm, said selected
information being encrypted in accordance with said
encryption algorithm.
4. The apparatus of claim 3 wherein said encryption
25 algorithm is an RSA algorithm.
5. The apparatus of claim 3 wherein said encryption
algorithm is a digital signature algorithm (DSA).
- 30 6. The apparatus of claim 1 wherein said memory
includes information for determining past postage
dispensation.
- 35 7. The apparatus of claim 1 wherein the value of the
postage funds is changed in response to a purchase.

Sub A¹³
8. Apparatus for generating a content of a mail piece, said mail piece including a cover for enclosing said content, said apparatus comprising:

5 an input for receiving data representative of at least said content, said data excluding a value of cost of delivery of said mail piece;

a processor for computing the cost of delivery of said mail piece based on said data; and

10 an output for generating said content based on said data, and applying at least an indicator indicative of the computed cost onto said content at a selected location thereof.

15 9. The apparatus of claim 8 wherein said cost includes postage for delivering said mail piece.

10. The apparatus of claim 8 wherein said indicator includes a postage indicium.

20 11. The apparatus of claim 8 wherein said indicator is applied onto said content close to an address.

25 12. The apparatus of claim 8 wherein information concerning said cost is read by a scanner's scanning said indicator.

13. The apparatus of claim 8 wherein said cover is an envelope.

30 14. The apparatus of claim 13 wherein said envelope has at least one window coinciding with said indicator such that at least part of said indicator exposes through the at least one window.

35 15. The apparatus of claim 8 wherein at least part of said data is indicative of the selected location.

16. The apparatus of claim 8 wherein the selected location is a corner of said content.
17. The apparatus of claim 8 wherein said processor
5 derives, from said data, information for determining a weight of said content.
18. The apparatus of claim 8 wherein said processor
10 derives, from said data, information concerning pagination of the content.
19. The apparatus of claim 8 wherein said processor
15 derives, from said data, information concerning an address.
20. The apparatus of claim 19 wherein said information
includes zip code information.
21. The apparatus of claim 8 wherein said processor
20 derives, from said data, information for identifying at least one party to which said cost is attributed.
22. The apparatus of claim 8 wherein said processor
25 computes said cost based on one or more selected shipping rates.
23. The apparatus of claim 8 further comprising a memory
for storing a database.
- 30 24. The apparatus of claim 23 wherein said database includes statistical information based on said cost.
25. The apparatus of claim 23 wherein said database
35 includes information identifying said mail piece for tracking thereof.

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-155-

26. Apparatus for processing a mail piece for which postage needs to be dispensed before delivery of the mail piece comprising:

- 5 an interface for obtaining from the mail piece selected information appearing on the mailing piece; and a processor responsive to at least the selected information for determining whether to dispense the postage.

10 27. The apparatus of claim 26 wherein said interface includes a connector for connecting a scanner to said apparatus.

15 3 28. The apparatus of claim 26 wherein the selected information is represented by a bar-code on said mail piece.

20 29. The apparatus of claim 26 wherein the selected information includes data identifying an originator of said mail piece.

25 30. The apparatus of claim 29 wherein the processor disallows a dispensation of the postage when said originator is determined to be unauthorized to expend the postage.

31. The apparatus of claim 29 wherein the originator is an individual.

30 32. The apparatus of claim 29 wherein the originator is an organization.

35 6 33. The apparatus of claim 26 wherein the selected information includes information representative of an authorization code.

34
-56-

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34. The apparatus of claim 7 further comprising a receiver for receiving data representative of cost of said delivery.

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- 5 35. The apparatus of claim 7 wherein the processor determines whether to dispense the postage also in response to said data.

36. Postage dispensing apparatus comprising:

10 a processor for creating a postage indicium, said postage indicium including a proof of payment for service by a first party, and transactional data comprising at least information representative of a transaction amount, said first party causing said transaction amount to be
15 paid to a second party in response to at least said transactional data when said first party processes said postage indicium; and

an output for generating said postage indicium.

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- 20 37. The apparatus of claim 9 wherein said transactional data includes information identifying said second party.

25 38. The apparatus of claim 36 wherein said transactional data includes information concerning an originator of said postage indicium.

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39. The apparatus of claim 9 wherein said transactional data includes an indicator indicative of a method by which the transaction amount is paid to the second party.

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23 40. The apparatus of claim 27 wherein said method includes an electronic funds transfer.

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- 35 41. The apparatus of claim 9 wherein said transactional data includes a personal identification number (PIN).

-35-

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42. The apparatus of claim 41 wherein said PIN is encrypted.

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43. The apparatus of claim 36 wherein said transactional data includes instructional information, the first party causing the transaction amount to be paid to the second party in response to the instructional information.

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44. The apparatus of claim 43 wherein said instructional information includes a request for a confirmation by the first party to the second party that the transaction amount has been paid.

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45. The apparatus of claim 43 wherein said instructional information includes information on a date by which the transaction amount is paid to the second party.

46. The apparatus of claim 36 wherein said postage indicium includes a digital signature for authenticating at least part of said postage indicium.

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47. The apparatus of claim 36 wherein said transactional data is encoded in a bar-code.

48. The apparatus of claim 36 wherein said postage indicium includes a human readable portion.

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49. The apparatus of claim 48 wherein said human readable portion includes information identifying said second party.

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50. The apparatus of claim 48 wherein said human readable portion includes the transaction amount.

51. The apparatus of claim 36 wherein said postage indicium includes a machine readable portion.

-36-

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52. The apparatus of claim ⁹36 wherein said first party is a postal authority.

53. The apparatus of claim 52 wherein said second party is a courier other than the postal authority.

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54. The apparatus of claim ⁹36 wherein the amount of said payment for service is zero.

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55. The apparatus of claim 36 wherein said postage indicium is generated onto a tangible medium.

56. The apparatus of claim 55 wherein said tangible medium is paper.

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57. The apparatus of claim 36 wherein said postage indicium is generated onto a mail piece.

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58. Postage processing apparatus comprising:
a processor for processing at least one postage indicium including a proof of payment for service by a first party, and transactional data comprising at least information representative of a transaction amount; and
an output responsive to at least said transactional data for causing said transaction amount to be paid to a
25 second party when the postage indicium is processed.

59. The apparatus of claim 58 wherein said postage indicium appears on a mail piece.

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60. The apparatus of claim ⁴⁵59 wherein said processor causes said mail piece to be delivered according to an address appearing on said mail piece.

-37-

Sub A13
61. The apparatus of claim 58 wherein said processor includes a scanner for scanning at least part of said postage indicium.

5 ³⁵~~62~~. The apparatus of claim ³³~~58~~ wherein said transactional data includes information identifying said second party.

Sub A14
63. The apparatus of claim 58 wherein said transactional data includes information concerning an originator of said postage indicium.

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15 ³⁷~~64~~. The apparatus of claim ³³~~58~~ wherein said transactional data includes an indicator indicative of a method by which the transaction amount is paid to the second party.

³⁶~~65~~. The apparatus of claim ³³~~58~~ wherein said method includes an electronic funds transfer.

20 ⁴⁷~~66~~. The apparatus of claim ³³~~58~~ wherein said transactional data includes a PIN.

⁴⁸~~67~~. The apparatus of claim ⁴⁷~~56~~ wherein said PIN is encrypted.

25 ⁵³~~68~~. The apparatus of claim ³³~~58~~ wherein said transactional data includes instructional information, the first party causing the transaction amount to be paid to the second party in response to said instructional information.

30 ⁵⁴~~69~~. The apparatus of claim ⁵³~~68~~ wherein said instructional information includes a request for a confirmation by the first party to the second party that the transaction amount has been paid.

-38-

⁵⁵
70. The apparatus of claim ⁵³68 wherein said instructional information includes information on a date by which the transaction amount is paid to the second party.

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71. The apparatus of claim 58 wherein said postage indicium includes a digital signature for authenticating at least part of said postage indicium.

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72. The apparatus of claim ³³58 wherein said transactional data is encoded in a bar-code.

73. The apparatus of claim 58 wherein said postage indicium includes a human readable portion.

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74. The apparatus of claim ⁵⁶73 wherein said human readable portion includes information identifying said second party.

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75. The apparatus of claim ⁵⁶73 wherein said human readable portion includes the transaction amount.

76. The apparatus of claim 58 wherein said postage indicium includes a machine readable portion.

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77. The apparatus of claim ³³58 wherein said first party is a postal authority.

78. The apparatus of claim 77 wherein said second party is a courier other than the postal authority.

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79. The apparatus of claim ³³58 wherein the amount of said payment for service is zero.

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80. The apparatus of claim ³³58 wherein said postage indicium is fixed on a tangible medium.

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-57-

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81. The apparatus of claim 80 wherein said tangible medium includes a label.

82. A system for dispensing postage for a mail piece comprising:

an IC module comprising a memory for storing first data representative of a value of postage funds; an interface for receiving selected information concerning the mail piece and information concerning a value of the postage, the value of the postage funds being a function of the value of the postage; and a processor for encrypting at least the selected information to generate second data; and

an output for generating a postage indicium indicative of payment of the postage based on at least the first data and the second data.

83. The system of claim 82 further comprising a computer.

84. The system of claim 83 wherein said computer is a personal computer (PC).

85. The system of claim 82 further comprising a control element for controlling access to said system.

86. The system of claim 82 further comprising a management information subsystem for processing documents.

87. The system of claim 86 wherein said documents include invoices.

88. The system of claim 82 further comprising an address cleanser for checking address information on the mail piece.

89. The system of claim 82 further comprising a second interface for obtaining shipping rate information.

5 90. The system of claim 82 further comprising a second interface for communicating with a remote computer.

10 91. The system of claim 82 further comprising a second interface for establishing a connection to a communication network.

92. The system of claim 91 wherein said communication network includes at least part of the Internet.

15 93. The system of claim 82 further comprising a communicator for communicating information with a selected recipient.

20 94. The system of claim 93 wherein said communicator communicates with a certification authority other than the selected recipient to verify receipt by the selected recipient of the information.

25 95. The system of claim 93 wherein said communicator communicates with a certification authority other than the selected recipient to verify access by the selected recipient to the information.

30 96. The system of claim 82 wherein said second data includes a digital signature.

97. The system of claim 82 further comprising a transmitter for transmitting facsimile information.

35 98. The system of claim 97 wherein said facsimile information is encrypted.

99. The system of claim 97 wherein said facsimile information includes a digital signature for authenticating the facsimile transmission.

5 100. The system of claim 82 further comprising a receiver for receiving facsimile information.

10 101. The system of claim 100 wherein said facsimile information is encrypted, said receiver includes a decoder for decrypting the encrypted facsimile information.

15 102. The system of claim 100 wherein said facsimile information includes a digital signature, said receiver includes a mechanism for verifying said digital signature.

20 103. The system of claim 82 wherein said memory further includes an encryption algorithm, said selected information being encrypted in accordance with said encryption algorithm.

25 104. The system of claim 103 wherein said encryption algorithm is an RSA algorithm.

105. The system of claim 103 wherein said encryption algorithm is a DSA.

30 106. The system of claim 82 wherein said memory includes information for determining past postage dispensation.

35 107. A method for use in an IC module for dispensing postage for a mail piece comprising the steps of:
storing first data representative of a value of postage funds;

receiving selected information concerning the mail piece and information concerning a value of the postage, the value of the postage funds being a function of the value of the postage;

5 encrypting at least the selected information to generate second data, and

 providing the first data and the second data for creation of a postage indicium indicative of payment of the postage.

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108. The method of claim 107 wherein said second data includes a digital signature.

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109. The method of claim 107 wherein said selected information is encrypted in accordance with an encryption algorithm.

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110. The method of claim 109 wherein said encryption algorithm is an RSA algorithm.

111. The method of claim 109 wherein said encryption algorithm is a DSA.

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112. The method of claim 107 wherein the value of the stored postage funds is changed in response to a purchase.

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113. A method for generating a content of a mail piece, said mail piece including a cover for enclosing said content, said method comprising the steps of:

 receiving data representative of at least said content, said data excluding a value of cost of delivery of said mail piece;

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 computing the cost of delivery of said mail piece based on said data;

 generating said content based on said data; and

115. The method of claim 113 wherein/said indicator includes a postage indicium.

116. The method of claim 113 wherein said indicator is
5 applied onto said content close to an address.

117. The method of claim 113 wherein said cover is an envelope.

10 118. The method of claim 117 wherein said envelope has at least one window coinciding with said indicator such that at least part of said indicator exposes through the at least one window.

15 119. The method of claim 113/ wherein at least part of
said data is indicative of the selected location.

120. The method of claim 113 wherein the selected location is a corner of said content.

121. The method of claim/113 wherein information for determining a weight of said content is derived from said data.

25 122. The method of claim 113 wherein information
concerning pagination of the content is derived from said
data.

123. The method of claim 113 wherein information
30 concerning an address is derived from said data.

124. The method of claim 123 wherein said information includes zip code information.

125. The method of claim 113 wherein information for identifying at least one party to which said cost is attributed is derived from said data.

5 126. The method of claim 113 wherein said cost is computed based on one or more selected shipping rates.

127. The method of claim 113 further comprising the step of storing a database.

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128. The method of claim 127 wherein said database includes statistical information based on said cost.

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129. The method of claim 127 wherein said database includes information identifying said mail piece for tracking thereof.

130. A method for processing a mail piece for which postage needs to be dispensed before delivery of the mail piece comprising the steps of:

obtaining from the mail piece selected information appearing on the mailing piece; and

determining whether to dispense the postage in response to at least the selected information.

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131. The method of claim 130 wherein the selected information is represented by a bar-code on said mail piece.

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132. The method of claim 130 wherein the selected information includes data identifying an originator of said mail piece.

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133. The method of claim 132 wherein the a dispensation of the postage is disallowed when said originator is determined to be unauthorized to expend the postage.

134. The method of claim 132 wherein the originator is an individual.

135. The method of claim 132 wherein the originator is an organization.

136. The method of claim 130 wherein the selected information includes information representative of an authorization code.

137. The method of claim 130 further comprising the step of receiving data representative of cost of said delivery.

138. The method of claim 137 wherein whether to dispense the postage is determined also in response to said data.

139. A method for dispensing postage comprising the steps of:

creating a postage indicium, said postage indicium including a proof of payment for service by a first party, and transactional data comprising at least information representative of a transaction amount, said first party causing said transaction amount to be paid to a second party in response to at least said transactional data when said first party processes said postage indicium; and

generating said postage indicium.

140. The method of claim 139 wherein said transactional data includes information identifying said second party.

141. The method of claim 139 wherein said transactional data includes information concerning an originator of said postage indicium.

47
-63-

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142. The method of claim 139 wherein said transactional data includes an indicator indicative of a methodology by which the transaction amount is paid to the second party.

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5 143. The method of claim 142 wherein said methodology includes an electronic funds transfer.

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144. The method of claim 139 wherein said transactional data includes a PIN.

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10 145. The method of claim 144 wherein said PIN is encrypted.

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15 146. The method of claim 139 wherein said transactional data includes instructional information, the first party causing the transaction amount to be paid to the second party in response to the instructional information.

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20 147. The method of claim 146 wherein said instructional information includes a request for a confirmation by the first party to the second party that the transaction amount has been paid.

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25 148. The method of claim 146 wherein said instructional information includes information on a date by which the transaction amount is paid to the second party.

Sub A24
30 149. The method of claim 139 wherein said postage indicium includes a digital signature for authenticating at least part of said postage indicium.

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150. The method of claim 139 wherein said transactional data is encoded in a bar-code.

Sub A25
35 151. The method of claim 139 wherein said postage indicium includes a human readable portion.

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152. The method of claim 151 wherein said human readable portion includes information identifying said second party.

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5 153. The method of claim 151 wherein said human readable portion includes the transaction amount.

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154. The method of claim 151 wherein said postage indicium includes a machine readable portion.

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155. The method of claim 139 wherein said first party is a postal authority.

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156. The method of claim 155 wherein said second party is a courier other than the postal authority.

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157. The method of claim 139 wherein the amount of said payment for service is zero.

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158. The method of claim 139 wherein said postage indicium is generated onto a tangible medium.

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159. The method of claim 158 wherein said tangible medium includes a label.

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160. The method of claim 139 wherein said postage indicium is generated onto a mail piece.

161. A postage processing method comprising the steps of:
processing at least one postage indicium including a proof of payment for service by a first party, and transactional data comprising at least information representative of a transaction amount; and

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causing, in response to at least said transactional data, said transaction amount to be paid to a second party when the postage indicium is processed.

49
-48-

162. The method of claim 161 wherein said postage indicium appears on a mail piece.

163. The method of claim 162 wherein said mail piece is delivered according to an address appearing on said mail piece.

164. The method of claim 161 wherein said transactional data includes information identifying said second party.

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165. The method of claim 161 wherein said transactional data includes information concerning an originator of said postage indicium.

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166. The method of claim 161 wherein said transactional data includes an indicator indicative of a methodology by which the transaction amount is paid to the second party.

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167. The method of claim 166 wherein said methodology includes an electronic funds transfer.

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168. The method of claim 161 wherein said transactional data includes a PIN.

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169. The method of claim 168 wherein said PIN is encrypted.

170. The method of claim 161 wherein said transactional data includes instructional information, the first party causing the transaction amount to be paid to the second party in response to said instructional information.

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171. The method of claim 170 wherein said instructional information includes a request for a confirmation by the first party to the second party that the transaction amount has been paid.

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172. The method of claim ~~170~~⁵⁰ wherein said instructional information includes information on a date by which the transaction amount is paid to the second party.

Sub A31
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173. The method of claim ~~161~~ wherein said postage indicium includes a digital signature for authenticating at least part of said postage indicium.

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174. The method of claim ~~161~~⁸⁹ wherein said transactional data is encoded in a bar-code.

Sub A32
175. The method of claim ~~161~~ wherein said postage indicium includes a human readable portion.

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176. The method of claim ~~175~~¹¹⁰ wherein said human readable portion includes information identifying said second party.

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177. The method of claim ~~175~~¹¹⁰ wherein said human readable portion includes the transaction amount.

Sub A33
178. The method of claim ~~161~~ wherein said postage indicium includes a machine readable portion.

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179. The method of claim ~~161~~⁸⁹ wherein said first party is a postal authority.

Sub A34
180. The method of claim ~~179~~ wherein said second party is a courier other than the postal authority.

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181. The method of claim ~~161~~⁸⁹ wherein the amount of said payment for service is zero.

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182. The method of claim ~~161~~⁸⁹ wherein said postage indicium is fixed on a tangible medium.

51
-64-

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183. The method of claim 182 wherein said tangible medium includes a label.

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184. A method for use in a system for dispensing postage
5 for a mail piece, said system including an IC module,
comprising the steps of:

storing first data representative of a value of
postage funds in the IC module;

receiving by the IC module selected information
10 concerning the mail piece and information concerning a
value of the postage, the value of the postage funds
being a function of the value of the postage;

encrypting by the IC module at least the selected
information to generate second data; and

15 generating a postage indicium indicative of payment
of the postage based on at least the first data and the
second data.

185. The method of claim 184 further comprising the step
20 of controlling access to said system.

186. The method of claim 184 further comprising the step
of checking address information on the mail piece.

25 187. The method of claim 184 further comprising the step
of obtaining shipping rate information.

188. The method of claim 184 further comprising the step
30 of communicating information with a selected recipient.

189. The method of claim 188 wherein the communicating
step includes the step of communicating with a
certification authority other than the selected recipient
to verify receipt by the selected recipient of the
35 information.

190. The method of claim 188 wherein the communicating step including the step of communicating with a certification authority other than the selected recipient to verify access by the selected recipient to the information.

191. The method of claim 184 wherein said second data includes a digital signature.

192. A method for sending a mail piece comprising the steps of:
indicating on the mail piece information concerning a content in the mail piece; and
providing on the mail piece an indicator for affirming that the content is included in the mail piece, said indicator causing a processor of the mail piece to inform a third party of the information while the mail piece is being sent.

193. The method of claim 192 wherein the content includes a payment.

194. The method of claim 193 wherein the information includes an amount of the payment.

195. The method of claim 192 wherein the third party is an addressee of the mail piece.

196. The method of claim 192 wherein the indicator includes a digital signature.

197. The method of claim 192 wherein the information is encrypted.

198. The method of claim 192 wherein the information is incorporated in a postage indicium.